AMENDMENTS TO THE CLAIMS PURSUANT TO REVISED 37 CFR § 1.21

1. (Currently Amended) A device comprising first and second side channels attached to a microdroplet transport channel etched in substrate so as to create first and second intersections, said first and second side channels having hydrophobic surfaces substrate selected from the group consisting of silicon, quartz and glass, said microdroplet transport channel comprising a hydrophobic region and liquid abutting one or more said hydrophobic region[[s]], said liquid extending through said first intersection without entering said first side channel wherein said device further comprises a gas intake pathway in fluidic communication with said microdroplet channel and, wherein one of said hydrophobic region[[s]] is positioned in said microdroplet transport channel between said first and second side channels gas intake pathway and said gas vent.

2-5. (Canceled)

6. (Currently Amended) A device comprising first and second side channels attached to a microdroplet transport channel so as to create first and second intersections, said first and second side channels having hydrophobic surfaces, said microdroplet transport channel comprising i) first and second ends, said first end comprising a liquid inlet port and ii) a hydrophobic region disposed within said microdroplet transport channel between said first and second ends, and iii) liquid extending from said inlet port through said first intersection, without entering said first side channel, and abutting said hydrophobic region wherein said device further comprises a gas intake pathway positioned internal to said first end of said channel, said gas intake pathway in fluidic communication with said microdroplet channel, and further wherein said hydrophobic region is positioned in said channel between said gas-intake pathway and said gas vent.

7-11. (Canceled)

- 12. (Original) The device of Claim 6, wherein said device is fabricated from a glass, quartz or silicon substrate.
- 13. (Presently Amended) The device of Claim $\underline{6}$ [[12]], wherein said $\underline{\text{microdroplet}}$ $\underline{\text{transport}}$ channel[[s]] $\underline{\text{are is}}$ between 5 and 20 μ m in depth and between 20 and 1000 μ m in width.
- 14. (New) The device of Claim 1, wherein said microdroplet transport channel is between 5 and 20 μm in depth and between 20 and 1000 μm in width.